



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/671,172	09/25/2003	Nusrallah Jubran	3216.25US01	7007

24113 7590 10/03/2005

PATTERSON, THUENTE, SKAAR & CHRISTENSEN, P.A.
4800 IDS CENTER
80 SOUTH 8TH STREET
MINNEAPOLIS, MN 55402-2100

EXAMINER

RODEE, CHRISTOPHER D

ART UNIT	PAPER NUMBER
----------	--------------

1756

DATE MAILED: 10/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/671,172

Applicant(s)

JUBRAN ET AL.

Examiner

Christopher RoDee

Art Unit

1756

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 August 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 and 23-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-10, 12-14, 23-25 and 27 is/are rejected.
- 7) ☒ Claim(s) 4, 11, and 26 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-3, 5-10, 12-14, 23-25, and 27 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Independent claims 1, 8, and 23 have been amended to specify that the charge transport compound has R₁ as a phenyl group and R₂ as a phenyl group or alkyl group. A review of the specification shows that "group" includes substituted variants of the base group. See specification page 9, line 17 *et seq.* Thus, phenyl group includes substituted variants of phenyl. One such substituted phenyl group would be alkylsulfonylphenyl. This alkylsulfonylphenyl group is now included within the scope of the claims but the specification as filed specifically excludes this group (see spec. p. 3, l. 3-5). The claims as presented are broader than permitted by the disclosure. New matter is present.

Further, the combination of R₁ is a phenyl group and R₂ is a phenyl group is without basis in the specification as filed. Exemplified compounds show a combination of a phenyl moiety with an alkyl moiety (see spec. p. 10, l. 5-9 where moiety is defined as being unsubstituted). The specification as filed does not disclose a charge transport compound with

Art Unit: 1756

two phenyl groups either substituted or unsubstituted on R₁ and R₂. New matter is present for this combination.

New claim 27 is also without basis in the specification as filed because the specification does not disclose a charge transport compound where R₂ is a phenyl group and R₁ is alkyl, aryl, or aryl. As discussed above the specification only discloses a phenyl moiety as one of the R groups from the nitrogen when the other R group is an alkyl moiety.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 27 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 27 contains two definitions for R₂. It is unclear which of the two different definitions is proper for this group.

Claim Rejections - 35 USC § 102

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1, 3, 5-8, 10, 12-14, 23, 25, and 27 are rejected under 35 U.S.C. 102(e) as being anticipated by Law *et al.* in US Patent Application Publication 2003/0198880.

Law discloses a charge transport compound having an alkylsulfonylphenyl group as R₂ and an alkyl group as R₁ (Abstract; ¶¶ [0028] & [0029]). Alkylsulfonylphenyl meets the requirements of a phenyl group because the instant claims permit substitution on a phenyl ring

Art Unit: 1756

as discussed on page 9, line 17 through page 10, line 9. New claim 27 is disclosed by Law when X is a bond because $m=0$ and Y is oxygen or aryl (¶¶ [0030] & [0031]). The charge transport compound is placed in a photosensitive layer with a charge generating compound and a binder resin. This layer is located on a conductive support and forms an organophotoreceptor (Abstract, ¶ [0022] – [0036]). The photosensitive layer can contain a second charge transport material (¶ [0037]).

The organophotoreceptor is used in an imaging apparatus having supporting rollers, a liquid toner dispenser, and an exposure source for imagewise exposing the photoreceptor (¶ [0020]).

Claim Rejections - 35 USC § 103

Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Law *et al.* in US Patent Application Publication 2003/0198880.

In the event the disclosure of Law is not sufficient to anticipate claim 27, it would have been obvious to one having ordinary skill in the art at the time the invention was made to produce the charge transport compound of the reference with X as a bond when $m=0$ and Y as oxygen or aryl because the reference discloses these groups as effective to form a charge transport compound in ¶¶ [0030] & [0031].

Double Patenting

Claims 8-10, 12-14, and 23-25, 27 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-6 and 13-18 of copending Application No. 10/983020. Although the conflicting claims are not identical, they are not patentably distinct from each other because a light imaging component would have been

Art Unit: 1756

obvious to add to an electrophotographic imaging apparatus in order to form an image on the photoreceptor. The photoreceptor is by definition a light sensitive article and in order to use this article in an imaging apparatus it would have been obvious to include a light imaging component (e.g., laser, LED, reflective light, etc.). Further, the artisan would have found it obvious to select the combination of substituents specified in option A in the copending claims for the charge transport component because this combination is disclosed as effective.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

The terminal disclaimer filed on 24 August 2005 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of US Application 10/349811 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Allowable Subject Matter

Claims 4, 11, and 26 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher RoDee whose telephone number is 571-272-1388. The examiner can normally be reached on most weekdays from 6:00 to 4:30.

Art Unit: 1756

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Huff can be reached on 571-272-1385. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

cdr
27 September 2005



CHRISTOPHER RODEE
PRIMARY EXAMINER